


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Paul J. Godowski et al. Serial No.: To be assigned	Group Art Unit: Unassigned Examiner: Unassigned
Filed: 30 June 1998 (Filed Herewith) For: ErbB4 Receptor-Specific Neuregulin Related Ligands and Uses Therefor	<div style="text-align: right; font-size: small;"> jc518 U.S. PTO 09/107979 </div> <div style="text-align: center;"> CERTIFICATION UNDER 37 CFR 1.10 EM 168 883 749 US: Express Mail Number June 30, 1998: Date of Deposit <small>I hereby certify that this correspondence, consisting of CERTIFICATE RE: SEQUENCE LISTING RESPONSE UNDER 37 CFR § 1.821(f) and (g), paper copy and a computer-readable diskette, is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner of Patents, Washington, D.C. 20231.</small>  Pamela Gavette </div>

**CERTIFICATE RE: SEQUENCE LISTING****RESPONSE UNDER 37 CFR § 1.821(f) and (g)**

BOX PATENT APPLICATION
 Assistant Commissioner of Patents
 Washington, D.C. 20231

Sir:

I hereby state that the Sequence Listing submitted herewith is submitted in paper copy and a computer-readable diskette, and that the content of the paper and computer readable copies are the same. I further state that this submission includes no new matter.

Respectfully submitted,

GENENTECH, INC.

Date: June 30, 1998

By: 

Deirdre L. Conley, Ph.D.

Reg. No. 36,487

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 So. San Francisco, CA 94080-4990
 Phone: (650) 225-2066
 Fax: (650) 952-9881

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/107,979DATE: 07/09/98
TIME: 13:50:58

INPUT SET: S27313.raw

This Raw Listing contains the General
Information Section and up to the first 5 pages.

ENTERED

SEQUENCE LISTING

- 1
2
3 (1) General Information:
4
5 (i) APPLICANT: Godowski, Paul J., Mark, Melanie Rose, Zhang, Dong Xiao
6
7 (ii) TITLE OF INVENTION: ErbB Receptor-Specific Neuregulin Related
8 Ligands and Uses Therefor
9
10 (iii) NUMBER OF SEQUENCES: 23
11
12 (iv) CORRESPONDENCE ADDRESS:
13 (A) ADDRESSEE: Genentech, Inc.
14 (B) STREET: 1 DNA Way
15 (C) CITY: South San Francisco
16 (D) STATE: California
17 (E) COUNTRY: USA
18 (F) ZIP: 94080
19
20 (v) COMPUTER READABLE FORM:
21 (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
22 (B) COMPUTER: IBM PC compatible
23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
24 (D) SOFTWARE: WinPatin (Genentech)
25
26 (vi) CURRENT APPLICATION DATA:
27 (A) APPLICATION NUMBER: Unassigned
28 (B) FILING DATE: 30-Jun-1998
29 (C) CLASSIFICATION:
30
31 (viii) ATTORNEY/AGENT INFORMATION:
32 (A) NAME: Conley, Deirdre L.
33 (B) REGISTRATION NUMBER: 36,487
34 (C) REFERENCE/DOCKET NUMBER: P1084R1-2
35
36 (ix) TELECOMMUNICATION INFORMATION:
37 (A) TELEPHONE: 650/225-2066
38 (B) TELEFAX: 650/952-9881
39 (2) INFORMATION FOR SEQ ID NO:1:
40
41 (i) SEQUENCE CHARACTERISTICS:
42 (A) LENGTH: 2538 base pairs
43 (B) TYPE: Nucleic Acid
44 (C) STRANDEDNESS: Single
45 (D) TOPOLOGY: Linear
46

091079.051098

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/107,979DATE: 07/09/98
TIME: 13:50:59

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47 (ix) FEATURE:
48 (A) NAME/KEY: mouse NRG3 nucleic acid
49 (B) LOCATION: 1-2538
50 (C) IDENTIFICATION METHOD:
51 (D) OTHER INFORMATION:
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53 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
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60 CCCGCCGCCC GCCTCTCGGG GGGAGGGGCG TGGGGGCAGG GAGCCGATTT 150
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62 GCATGCGGCC GCCGCGGCCG CTGCCTGAGC CGGAGCCCCG CGCCGCCGGA 200
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66 GGCCCTCGGG GGGGCGAAGG TGAAGATCGG CTCCTAGGAT GAGTGAAGGG 300
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68 GCGGCCGGTG CCTCGCCACC TGGTGCCGCT TCGGCAGCCG CCGCCTCAGC 350
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70 CGAGGAGGGC ACCGCGGCGG CTGCGGCGGC GCGGCGGGCG GCGGGGGGCC 400
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72 CGGACGGCGG CGGAGAAGGG GCGGCCGAAC CCCCCCGGGA GTTACGCTGT 450
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74 AGCGACTGCA TCGTGTGGAA CCGGCAGCAG ACGTGGTTGT GCGTGGTGCC 500
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76 TCTGTTTCATC GGCTTCATCG GCCTGGGGCT CAGCCTCATG CTGCTTAAAT 550
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78 GGATCGTGGT AGGCTCCGTC AAGGAGTACG TGCCACGGA CCTGGTGGAC 600
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80 TCCAAGGGAA TGGGCCAGGA CCCCTTCTTC CTCTCCAAGC CCAGCTCTTT 650
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82 CCCCAGGCT ATGGAAACCA CCACAACAAC CACTTCTACC ACGTCCCCCG 700
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84 CCACCCCTC TGCCGGCGGC GCCGCTTCTT CCAGGACGCC TAACCGGATT 750
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88 CCGGGTTCCC ATCCGGGCTA GCCCGCGCTC TACCACAGCA CGGAACACTG 850
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90 CTGCCCCTCC GACGGTCTTG TCCACCACGG CCCCTTTCTT CAGTAGCAGC 900
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92 ACGCCCGGCT CCCGACCCC GATGCCAGGA GCCCCAGTA CGCAGGCGAT 950
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94 GCCTTCCTGG CCCACTGCGG CGTATGCTAC CTCCTCCTAC CTCCACGATT 1000
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98 TCCTCCTCAC CCTCTCCAC CTCCTCCACT ACCACCACCC CAGAACTAG 1100
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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/107,979DATE: 07/09/98
TIME: 13:51:00

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106 CAAGGAAGGC TACCAAGGAG TCCGTTGTGA TCAATTTCTG CCGAAAACAG 1300
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108 ACTCCATCTT ATCGGATCCA ACAGACCACT TGGGGATTGA ATTCATGGAG 1350
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110 AGTGAAGACG TTTATCAAAG GCAGGTGCTG TCAATTTTCAT GTATCATCTT 1400
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112 TGGAATTGTC ATCGTGGGCA TGTTCGTGTC AGCATTCTAC TTCAAAAAGCA 1450
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128 CAACTTGAAG AATCAAGAAT TCCAGACCAG GATACGATAC CTTGCCAAGG 1850
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152 ATACAAAGAG ACTCTGTGCT AACCAAGTGA CTGGAAATGT AGGAATCTGT 2450

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RAW SEQUENCE LISTING PATENT APPLICATION US/09/107,979

DATE: 07/09/98
TIME: 13:51:00

INPUT SET: S27313.raw

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154 GCATTATATG CTTTGCTAAA CAGGAAGGAG AGGAAATTAA ATACAAATTA 2500
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156 TTTATATGCA TTAATTAAAG AGCATCTACT TAGAAGCC 2538
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158 (2) INFORMATION FOR SEQ ID NO:2:
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160 (i) SEQUENCE CHARACTERISTICS:
161 (A) LENGTH: 713 amino acids
162 (B) TYPE: Amino Acid
163 (D) TOPOLOGY: Linear
164
165 (ix) FEATURE:
166 (A) NAME/KEY: Mouse NRG3 (mNRG3)/amino acid seq.
167 (B) LOCATION: 1-713
168 (C) IDENTIFICATION METHOD:
169 (D) OTHER INFORMATION:
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171 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
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173 Met Ser Glu Gly Ala Ala Gly Ala Ser Pro Pro Gly Ala Ala Ser
174 1 5 10 15
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176 Ala Ala Ala Ala Ser Ala Glu Glu Gly Thr Ala Ala Ala Ala Ala
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179 Ala Ala Ala Ala Gly Gly Gly Pro Asp Gly Gly Gly Glu Gly Ala
180 35 40 45
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182 Ala Glu Pro Pro Arg Glu Leu Arg Cys Ser Asp Cys Ile Val Trp
183 50 55 60
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185 Asn Arg Gln Gln Thr Trp Leu Cys Val Val Pro Leu Phe Ile Gly
186 65 70 75
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189 80 85 90
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191 Val Gly Ser Val Lys Glu Tyr Val Pro Thr Asp Leu Val Asp Ser
192 95 100 105
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194 Lys Gly Met Gly Gln Asp Pro Phe Phe Leu Ser Lys Pro Ser Ser
195 110 115 120
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197 Phe Pro Lys Ala Met Glu Thr Thr Thr Thr Thr Thr Ser Thr Thr
198 125 130 135
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200 Ser Pro Ala Thr Pro Ser Ala Gly Gly Ala Ala Ser Ser Arg Thr
201 140 145 150
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203 Pro Asn Arg Ile Ser Thr Arg Leu Thr Thr Ile Thr Arg Ala Pro
204 155 160 165
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RAW SEQUENCE LISTING PATENT APPLICATION US/09/107,979

DATE: 07/09/98
TIME: 13:51:01

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212	Thr Thr Ala Pro Phe Phe Ser Ser Ser Thr Pro Gly Ser Arg Pro	
213		200 205 210
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215	Pro Met Pro Gly Ala Pro Ser Thr Gln Ala Met Pro Ser Trp Pro	
216		215 220 225
217		
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219		230 235 240
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221	Ser Trp Thr Leu Ser Pro Phe Gln Asp Ala Ala Ala Ala Ser Ser	
222		245 250 255
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224	Ser Ser Pro Ser Ser Thr Ser Ser Thr Thr Thr Thr Pro Glu Thr	
225		260 265 270
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227	Ser Thr Ser Pro Lys Phe His Thr Thr Thr Tyr Ser Thr Glu Arg	
228		275 280 285
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230	Ser Glu His Phe Lys Pro Cys Arg Asp Lys Asp Leu Ala Tyr Cys	
231		290 295 300
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233	Leu Asn Asp Gly Glu Cys Phe Val Ile Glu Thr Leu Thr Gly Ser	
234		305 310 315
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236	His Lys His Cys Arg Cys Lys Glu Gly Tyr Gln Gly Val Arg Cys	
237		320 325 330
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239	Asp Gln Phe Leu Pro Lys Thr Asp Ser Ile Leu Ser Asp Pro Thr	
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242	Asp His Leu Gly Ile Glu Phe Met Glu Ser Glu Asp Val Tyr Gln	
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249		380 385 390
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251	Ala Lys Gln Ile Gln Glu His Leu Lys Glu Ser Gln Asn Gly Lys	
252		395 400 405
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255		410 415 420
256		
257	Lys Ser His Val His Leu Gln Asn Tyr Ser Lys Ala Asp Arg His	
258		425 430 435

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